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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,957	09/30/2003	Jing Yu	042933/268435	5321
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ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			EXAMINER BOAKYE, ALEXANDER O	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/674,957

Applicant(s)

YU ET AL.

Examiner

ALEXANDER BOAKYE

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/14/05,09/30/03</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

1. Claims 1-21 are objected to because of the following informalities:

In claim 1 (lines 2, 3, 4, 5), "capable of" is not a positive recitation.

In claim 10 (line 1), "capable of" is not a positive recitation.

In claim 17, (lines 2, 3, 5), "capable of" is not a positive recitation.

In claim 15, "A computer program product" is not acceptable language in computer-processing related claims. It is not clear what "product" is being claimed.

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8 of copending Application No. 10/758,854.. Although the conflicting claims are not identical, they are not patentably distinct from each other because both Applications recite a communication system comprising: a first host capable of transmitting multiplexed data at a first transmission rate and a second host with the only difference between claim 1 of the instant application and claim 1 of copending application being that claim 1 of the instant application recites first and second congestion windows while claim 1 of the copending application disclose a data throttle. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of the instant application using the claim of the copending application for the benefit of controlling data transfer rate, thus enhancing congestion.

Claim 8 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 16 of copending Application No. 10/758,854. Although the conflicting claims are not identical, they are not patentably distinct from each other because both Applications recite a method of communication between a first host and the second host, with the only difference between claim 8 of the instant application and claim 16 of copending application being that claim 8 of the instant application recites first and second congestion windows while claim 16 of the copending application discloses setting a throttle value. Therefore it would have been

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obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of the instant application using the claim of the copending application for the benefit of controlling data transfer rate, thus enhancing congestion.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-5, 7-8, 10-12, 14-15, 17-19, 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Jayam et al. (US Patent # 7,096,247).

Regarding claim 1, Jayam teaches a system for bi-directional communication (Figs. 2-4) comprising: a first host (202, Fig. 2) capable of transmitting multiplexed data at a first transmission rate (transmission bandwidth) and operating with a first congestion window (column 5, lines 30-44 and column 6, lines 28-46 and column 1, lines 45-50), wherein the first host (202, Fig. 2) is also capable of receiving multiplexed data at a second

transmission rate(transmission bandwidth) from a second host (204, Fig. 2) capable of operating with a second congestion window (column 6, lines 35-46), and wherein the first host is capable of configuring at least one of a size of the first congestion window and a size of the second congestion window based upon the first transmission rate (transmission bandwidth), the size of the second congestion window, the second transmission rate and the size of the first congestion window (column 6, lines 1-16 and column 6, lines 48-62).

Regarding claim 3, Jayam further teaches that the second host is capable of receiving multiplexed data into a second reception window from the first host, (column 6, lines 35-42) wherein the first host is capable of configuring a size of the first congestion window based upon a maximum size of the first congestion window, and wherein the first host is capable of configuring the maximum size of the first congestion window based upon a size of the second reception window (column 6, lines 48-62).

Regarding claim 4, Jayam further teaches that the first host is capable of receiving multiplexed data into a first reception window, and wherein the first host is capable of configuring the size of the second congestion window based upon a size of the first reception window (column 6, lines 48-62).

Regarding claims 5, 12, Jayam teaches that the first host is capable of configuring the size of the second congestion window by: determining a size

of the first reception window based upon a maximum size of the first congestion window and the first and second transmission rates (column 5, lines 30-50 and column 6, lines 28-50); and transmitting multiplexed data to the second host indicating the size of the first reception window such that the second host configures the size of the second congestion window based upon the size of the first reception window (column 7, lines 3-25).

Regarding claim 7, Jayam further teaches that the first host is capable of continuously transmitting multiplexed data and receiving multiplexed data from the second host (column 5, lines 1-10), and wherein the first host is capable of continuously configuring at least one of the size of the first congestion window and the size of the second congestion window (column 6, lines 32-56).

Regarding claim 8, Jayam teaches a method of bi-directional communication between a first host (202, Fig.2) and a second host (204, Fig. 2) the method (Figs. 2-4) comprising: transmitting multiplexed data at a first transmission rate from the first host (202, Fig.2) operating with a first congestion window (column 5, lines 1-10 and column 1, lines 45-50); receiving multiplexed data at a second transmission rate from the second host operating with a second congestion window (column 6, lines 35-42); and configuring at least one of a size of the first congestion window and a size of the second congestion window based upon the first transmission rate, the size

of the second congestion window, the second transmission rate and the size of the first congestion window (column 6, lines 48-62).

Regarding claim 10, Jayam teaches that the second host is capable of receiving multiplexed data into a second reception window from the first host, wherein configuring a size of the first congestion window comprises configuring a size of the first congestion window based upon a maximum size of the first congestion window (column 5, lines 30-46 and column 6, lines 28-46), and wherein configuring a maximum size of the first congestion window comprises configuring a maximum size of the first congestion window based upon a size of the second reception window (column 6, lines 28-43 and column 7, lines 3-25).

Regarding claim 11, jayam further teaches that receiving multiplexed data comprises receiving multiplexed data into a first reception window, and wherein configuring a size of the second congestion window comprises configuring a size of the second congestion window based upon a size of the first reception window (column 6, lines 48-62).

Regarding claim 14, Jayam further teaches that transmitting multiplexed data and receiving multiplexed data comprise continuously transmitting multiplexed data and receiving multiplexed data, respectively (column 5, lines 1-17), and wherein configuring at least one of a size of the first congestion

window and a size of the second congestion window comprises continuously configuring at least one of a size of the first congestion window and a size of the second congestion window (column 6, lines 1-16 and column 6, lines 48-62).

Regarding claim 15, Jayam teaches a computer program product for bi-directional communication between a first host (202, Fig.2 and a second host (204, Fig.2), the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising: a first executable portion (206) for transmitting multiplexed data at a first transmission rate (transmission bandwidth) from the first host (202) operating with a first congestion window (column 5, lines 30-46 and column 6, lines 28-46) a second executable portion (210) for receiving multiplexed data at a second transmission rate (transmission bandwidth) from the second host (204) operating with a second congestion window (column 6, lines 28-46) ; and a third executable portion (208) for configuring at least one of a size of the first congestion window and a size of the second congestion window based upon the first transmission rate, the size of the second congestion window, the second transmission rate and the size of the first congestion window (column 6, lines 1-16 and column 6, lines 48-62).

Regarding claim 17, Jayam further teaches that the second host (204) is capable of receiving multiplexed data into a second reception window from the first host (202), wherein the third executable portion (208) is adapted to configure the size of the first congestion window based upon a maximum size of the first congestion window (column 6, lines 1-16 and column 6, lines 48-62), and wherein the third executable portion is adapted to configure the maximum size of the first congestion window co based upon a size of the second reception window (column 6, lines 48-62 and column 7, lines 3-25).

Regarding claim 18, Jayam further teaches that the first executable portion is adapted to receive multiplexed data into a first reception window, and wherein the third executable portion (208) is adapted to configure the size of the second congestion window based upon a size of the first reception Window (column 6, lines 48-62 and column 7, lines 3-25).

Regarding claim 19, Jayam further teaches that the third executable portion is adapted to configure the size of the second congestion window by: determining a size of the first reception window based upon a maximum size of the first congestion window and the first and second transmission rates (column 5, lines 30-50 and column 6, lines 28-50); and transmitting multiplexed data to the second host indicating the size of the first reception window such that the second host configures the size of the second

congestion window based upon the size of the first reception window (column 7, lines 3-25).

Regarding claim 21, Jayam teaches that the first and second executable portions are adapted to continuously transmit multiplexed data and receive multiplexed data, respectively, and wherein the third executable portion is adapted to continuously configure at least one of a size of the first congestion window and a size of the second congestion window (column 5, lines 30-50 and column 7, lines 3-25).

4. Claims 9, 13, 16, 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 2, 6 would be allowable if rewritten to overcome the objection, set forth in this Office action.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Ruutu et al. (US Patent # 6,219,713) discloses method and apparatus for adjustment of TCP sliding window with information about network conditions.

Kalampoukas et al. (US Patent # 6,438,101) discloses method and apparatus for managing congestion within an inter network using window adaptation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Boakye whose telephone number is (571) 272-3183. The examiner can normally be reached on M-F from 8:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (571) 272-3179. The Fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Electronic Business Center (EBC)** numbers at 866-217-9197 and 703-305-3028.

Alexander Boakye

Patent Examiner

5/11/07

A handwritten signature in black ink, appearing to read "Alexander Boakye", with a long horizontal line extending to the right.